

NATIONAL CAVE AND KARST RESEARCH INSTITUTE

MONTHLY UPDATE FOR APRIL 2004

PROGRESS MADE BY THE INSTITUTE STAFF AND PARTNERS THIS MONTH:

- We welcomed Dr. Tom Strong (TS) aboard in early April as the full-time Chief Scientist working under a contract with New Mexico Tech. Tom's arrival, following 2-days of orientation in Socorro with Tech, should help with several backlogged projects and help the Institute improve communication with our many partners.
- Unfortunately for us, Roger Scott (RS) left NCKRI in early April to pursue new opportunities in Wyoming. Roger's wife, Mary Gibson Scott, has accepted the position of Superintendent at Grand Tetons National Park. Roger made many contributions towards the establishment of the Institute and we regret losing him. Best wishes, Roger.
- RS worked to provide written documentation on the status of the various projects he had been pursuing and briefed TS on the various financial assistance projects he had been tracking.
- TS began reviewing files and making initial contacts with people around the country involved in Cooperative Agreements with NCKRI.
- TS made initial contacts with Elery Hamilton-Smith and Tom Rea regarding NCKRI participation in World Atlas of Karst project.
- Louise Hose (LH) made a presentation to the Chihuahuan Desert Conservation Alliance. She also addressed the top women high school scholars selected by the Carlsbad Chapter of the American Association of University Women and, separately, the top 100 Carlsbad High School seniors at their honors banquet.
- TS and LH inventoried the large book collection recently donated by Dr. Warren Lewis of Albuquerque.
- LH joined many local community and land management leaders attending a luncheon and meeting with National Park Service Director Fran Mainella. When questioned by Mayor Bob Forrest, Director Mainella expressed her desire to work quickly with the City to move ahead the Institute building project.
- LH, Lewis Land (LL), and TS responded to a call-out to help an experienced, local caver trapped behind a blocked entrance at a new Lincoln National Forest cave. They joined personnel from the NPS, USFS, BLM, Happy Valley Fire Department, and local cavers. The caver emerged uninjured after several boulders were moved by some of the responders. LH and TS also participated in the follow-up review convened by Tom Beamis of Carlsbad Caverns NP.
- LH met with former Guadalupe Mountains NP Superintendent and former Carlsbad City Council member Larry Henderson to discuss ways to facilitate supportive partnerships between the National Park Service and non-federal partners of the Institute as we develop our business plan.
- LH met with New Mexico Tech Associate Vice President Richard Cervantes to work out details on a draft Cooperative Agreement between Tech and the National Park Service.

- LH submitted Highlights of 2004 – Caves and Karst review paper for *Geotimes*, a publication of the American Geological Institute, and worked with the editor on revisions and clarifications. AGI requested and received both a 500 word version for the paper magazine and an 800 word version for their website. A photo by Margaret Palmer accompanied the submission.
- LH provided an e-mail interview to *Sciences et Avenir* magazine (France).
- LL lectured on karst geophysics in New Mexico Tech's Cave and Karst Systems class.
- LL examined earth fissures that formed recently in the vicinity of a BP oil pipeline south of Artesia, NM, probably associated with dissolution of gypsum bedrock of the underlying Seven Rivers Formation.
- LL made scuba investigation of 2 gypsum sinkholes at Bitter Lakes National Wildlife Refuge, east of Roswell, New Mexico. These sinkholes represent the discharge end of the regional hydrologic system in the Roswell Artesian Basin, and vividly demonstrate the relationship of karst processes to the hydrologic framework in the Basin. He also made a similar dive investigation of sinkhole lakes at base of Seven Rivers Escarpment, between Bitter Lakes National Wildlife Refuge and Bottomless Lakes State Park.
- LL submitted a budget to US Fish and Wildlife Service for proposed work investigating groundwater residence time in the Artesian Aquifer in the vicinity of Bitter Lakes National Wildlife Refuge. FWS is concerned about the environmental impact of oil and gas drilling near the Refuge. A better understanding of groundwater transit time is needed to make informed decisions about management of water resources on the Refuge.
- LL investigated surface springs and seeps along the Rio Bonito, west and north of Fort Stanton Cave, in anticipation of future dye trace study of Crystal Creek, a recently discovered stream in the Snowy River passage of the cave.
- The New Mexico Tech Cave and Karst Science class visited the Carlsbad area to examine local caves as part of their studies in the class. The class also went to the El Malpais region to collect actinomycete bacteria from the lava tubes for DNA analyses as part of Misty Milleson's master's thesis project.
- TS and LH worked with Chris Turk and other NPS staff in Denver to ensure that National Environmental Protection Act requirements are met as part of the process needed to transfer nearly \$2 million from the NPS to the City of Carlsbad to build the NCKRI headquarters. As part of the process, TS provided a brief analysis of threatened and endangered species and concluded that the project would have no effect on those species. He also contacted USFWS and confirmed that they do not issue letters of concurrence for a determination of no effect, and project is clear to proceed with regard to this issue.
- TS began internet searches for potential sources of grant money to support NCKRI.
- LH provided information on the plans for the NCKRI library to a potential donor and worked with New Mexico Tech staff to determine how such a donation might be arranged.

- LH discussed issues related to book appraisals and the growing NCKRI book collection with Rich Wolfert, a book dealer who specializes in cave and karst topics and also recently moved to Carlsbad.
- The 2003 Annual Report for the Institute was sent to the Government Printing Office in early April.

PLANS: Anticipated activities for the near future include:

- We hope to have copies of the 2003 Annual Report available by mid- to late-May.
- LH has accepted an invitation to speak at the Texas Speleological Association meeting in May. She also agreed to participate in a book signing during the event, which coincides with the release of her 1981 masters thesis on Sistema Purificación as an Association for Mexican Cave Studies Bulletin (<http://www.amcs-pubs.org/bul13.htm>).
- Dr. Arthur Palmer of the State University of New York – Oneonta has agreed to give the next NCKRI lecture in Carlsbad, tentatively scheduled for June 28th.
- The Institute will continue working on a draft business/operations plan.
- National Park Service staff will continue working on a Cooperative Agreement between the NPS and the City of Carlsbad, and another between the NPS and New Mexico Tech in order to facilitate the transfer of nearly \$2 million appropriated by Congress as a “pass-through” to the City for the NCKRI building.
- We anticipate continuing discussion with the National Speleological Society concerning a potential partnership arrangement supporting the *Journal of Cave and Karst Studies*.

NCKRI STAFF:

PB – Penelope Boston, New Mexico Institute of Mining and Technology in Socorro, NM

LH – Louise Hose, National Park Service

LL – Lewis Land, New Mexico Bureau of Geology and Mineral Resources in Carlsbad

RS – Roger Scott, National Park Service

TS – Thomas Strong, New Mexico Institute of Mining and Technology in Carlsbad, NM